

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. **(Previously Presented)** A radio network controller in a paging system that performs a paging processing for paging a mobile station in response to a paging command from a core network,

wherein said paging command includes a flag indicating whether or not said core network has a capability to recognize whether RRC connection is associated with said mobile station,

and said radio network controller comprises:

determination means for determining whether or not said flag indicates that said core network has said capability; and

paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating that said core network has said capability.

2. **(Previously Presented)** A radio network controller according to Claim 1, wherein said paging processing means comprises:

means for performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

means for performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

3. **(Original)** A radio network controller according to Claim 1, wherein said paging command is a paging message of the RANAP protocol.

4. **(Previously Presented)** A radio network controller according to Claim 1, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

5. **(Original)** A radio network controller according to Claim 2, wherein said paging command is a paging message of the RANAP protocol.

6. **(Previously Presented)** A radio network controller according to Claim 2, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

7. **(Previously Presented)** A radio network controller according to Claim 3, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

8. **(Previously Presented)** A radio network controller according to Claim 5, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

9. **(Previously Presented)** A paging system that performs a paging processing for paging a mobile station from a radio network controller in response to a paging command from a core network,

wherein said paging command includes a flag indicating whether or not said core network has a capability to recognize whether an RRC connection is associated with said mobile station,

and said radio network controller comprises:

determination means for determining whether or not said flag indicates that said core network has said capability; and

paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating said core network has said capability.

10. **(Previously Presented)** A paging system according to Claim 9,

wherein said paging processing means comprises:

means for performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

means for performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

11. **(Original)** A paging system according to Claim 9, wherein said paging command is a paging message of the RANAP protocol.

12. **(Previously Presented)** A paging system according to Claim 9, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

13. **(Original)** A paging system according to Claim 10, wherein said paging command is a paging message of the RANAP protocol.

14. **(Previously Presented)** A paging system according to Claim 10, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging

processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

15. **(Previously Presented)** A paging system according to Claim 11, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

16. **(Previously Presented)** A paging system according to Claim 13, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing means identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

17. **(Previously Presented)** A paging method that performs a paging processing for paging a mobile station from a radio network controller in response to a paging command from a core network,

wherein said paging command includes a flag indicating whether or not said core network has a capability to recognize whether an RRC connection is associated with said mobile station,

and said paging method comprises:

a determination step of determining at said radio network controller whether or not said flag indicates that said core network has said capability; and

a paging processing step of performing said paging process at said radio network controller using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating said core network has said capability.

18. **(Previously Presented)** A paging method according to Claim 17, wherein said paging processing step comprises:

a step of performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a step of performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

19. **(Original)** A paging method according to Claim 17, wherein said paging command is a paging message of the RANAP protocol.

20. **(Previously Presented)** A paging method according to Claim 17, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

21. **(Original)** A paging method according to Claim 18, wherein said paging command is a paging message of the RANAP protocol.

22. **(Previously Presented)** A paging method according to Claim 18, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

23. **(Previously Presented)** A paging method according to Claim 19, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

24. **(Previously Presented)** A paging method according to Claim 21, wherein said paging command further includes a connection ID for identifying a connection between

said radio network controller and a mobile station that is in a communication, so that the step of performing said paging processing identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

**25-79. Canceled.**

80. **(Previously Presented)** A radio network controller in a paging system that performs a paging processing for paging a mobile station in response to a paging command from a core network,

wherein said paging command includes a flag indicating whether or not said core network has a capability to recognize whether an RRC connection is associated with said mobile station,

and said radio network controller comprises:

a determination unit configured to determine whether or not said flag indicates that said core network has said capability; and

a paging processing unit configured to perform said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating that said core network has said capability.

81. **(Previously Presented)** A radio network controller according to Claim 80, wherein said paging processing unit comprises:

a first performing unit configured to perform said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a second performing unit configured to perform said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

82. **(Previously Presented)** A radio network controller according to Claim 80, wherein said paging command is a paging message of the RANAP protocol.

83. **(Previously Presented)** A radio network controller according to Claim 80, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

84. **(Previously Presented)** A radio network controller according to Claim 81, wherein said paging command is a paging message of the RANAP protocol.

85. **(Previously Presented)** A radio network controller according to Claim 81, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

86. **(Previously Presented)** A radio network controller according to Claim 82, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

87. **(Previously Presented)** A radio network controller according to Claim 84, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

88. **(Previously Presented)** A paging system that performs a paging processing for paging a mobile station from a radio network controller in response to a paging command from a core network,

wherein said paging command includes a flag indicating whether or not said core network has a capability to recognize whether an RRC connection is associated with said mobile station,

and said radio network controller comprises:

a determination unit configured to determine whether or not said flag indicates that said core network has said capability; and

a paging processing unit configured to perform said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating said core network has said capability.

89. **(Previously Presented)** A paging system according to Claim 88,

wherein said paging processing unit comprises:

a first performing unit configured to perform said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless; and

a second performing unit configured to perform said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.

90. **(Previously Presented)** A paging system according to Claim 88, wherein said paging command is a paging message of the RANAP protocol.

91. **(Previously Presented)** A paging system according to Claim 88, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

92. **(Previously Presented)** A paging system according to Claim 89, wherein said paging command is a paging message of the RANAP protocol.

93. **(Previously Presented)** A paging system according to Claim 89, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging



processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

94. **(Previously Presented)** A paging system according to Claim 90, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).

95. **(Previously Presented)** A paging system according to Claim 92, wherein said paging command further includes a connection ID for identifying a connection between said radio network controller and a mobile station that is in a communication, so that said paging processing unit identifies the connection by said connection ID and performs said paging processing using the dedicated control channel (DCCH).